

CLAIMS

WHAT IS CLAIMED:

- 1 1. A method for restoring resources on a computer, comprising:
2 providing a configuration database including resource information;
3 receiving a restoration request including a computer identifier associated with the
4 computer;
5 accessing the configuration database based on the computer identifier to identify a
6 restorable resource associated with the computer; and
7 providing the restorable resource to the computer.

- 1 2. The method of claim 1, further comprising installing the restorable resource on
2 the computer.

- 1 3. The method of claim 1, wherein providing the restorable resource to the
2 computer includes providing the restorable resource to a server connected to the computer.

- 1 4. The method of claim 3, further comprising accessing the computer through the
2 server to install the restorable resource on the computer.

- 1 5. The method of claim 1, wherein providing the restorable resource to the
2 computer includes providing an address for the restorable address.

- 1 6. The method of claim 1, further comprising authenticating the restoration
2 request.

1 7. The method of claim 1, wherein providing the restorable resource comprises
2 providing an encrypted restorable resource.

1 8. The method of claim 7, wherein the encrypted restorable resource is encrypted
2 with a private key, the method further comprising providing a public key corresponding to
3 the private key to the computer.

1 9. The method of claim 8, further comprising:
2 decrypting the encrypted restorable resource using the public key; and
3 installing the restorable resource on the computer.

1 10. The method of claim 1, further comprising encrypting the restorable resource
2 with a public key associated with the computer.

1 11. The method of claim 10, further comprising:
2 decrypting the encrypted restorable resource using a private key corresponding to the
3 public key; and
4 installing the restorable resource on the computer.

1 12. The method of claim 1, further comprising registering a plurality of installed
2 resources associated with the computer in the configuration database.

1 13. The method of claim 12, wherein registering the plurality of installed
2 resources includes providing a resource name and a computer identifier associated with the
3 computer.

1 14. The method of claim 13 wherein registering the plurality of installed resources
2 includes providing the resource name and computer identifier in an encrypted file.

1 15. The method of claim 1, further comprising billing a user based on the
2 restoration request.

1 16. The method of claim 12, further comprising billing a user based on the
2 plurality of installed resources registered.

1 17. The method of claim 1, wherein providing the configuration database includes
2 providing a configuration database having resource identifying information, resource version
3 information, and resource location information.

1 18. The method of claim 1, wherein providing the restorable resource comprises:
2 sharing a secret key with the computer;
3 encrypting a random number with the secret key;
4 generating a session key based on the secret key and the encrypted random number;
5 and
6 providing the restorable resource using the session key.

1 19. The method of claim 1, further comprising;
2 registering a set of installed resources for a plurality of computers;
3 billing a user at a first rate for installed resources that are unique to one of the
4 computers; and

5 billing the user at a second rate, different than the first rate, for installed resources that
6 are common to at least two of the computers.

1 20. The method of claim 12, wherein registering the plurality of installed
2 resources includes at least one of providing an address for the installed resource and storing
3 the installed resource, and the method further comprises billing a user at a first rate for
4 installed resources that registered by providing the address for the installed resource, and
5 billing the user at a second rate, different than the first rate, for installed resources that are
6 registered by storing the installed resource.

1 21. The method of claim 1, further comprising:
2 identifying an available upgrade for the restorable resource; and
3 offering the upgrade of the restorable resource in lieu of the restorable resource.

1 22. A computer system, comprising:
2 a computer having a plurality of installed resources; and
3 a configuration manager coupled to the computer and adapted to store a configuration
4 database including resource information associated with the computer, receive
5 a restoration request from the computer including a computer identifier
6 associated with the computer, access the configuration database to identify a
7 restorable resource based on the computer identifier associated with the
8 computer, and provide the restorable resource to the computer.

1 23. The computer system of claim 22, wherein the computer is adapted to install
2 the restorable resource.

1 24. The computer system of claim 22, further comprising a server coupled to the
2 computer and adapted to receive the restorable resource and install the restorable resource on
3 the computer.

1 25. The computer system of claim 22, further comprising a server coupled to the
2 computer, the configuration manager being housed on the server.

1 26. The computer system of claim 22, wherein the configuration manager is
2 adapted to provide the restorable resource to the computer by providing an address for the
3 restorable address.

1 27. The computer system of claim 22, wherein the configuration manager is
2 adapted to authenticate the restoration request.

1 28. The computer system of claim 22, wherein the configuration manager is
2 adapted to provide an encrypted restorable resource.

1 29. The computer system of claim 28, wherein the encrypted restorable resource is
2 encrypted with a private key, and the configuration manager is adapted to provide a public
3 key corresponding to the private key to the computer.

1 30. The computer system of claim 29, wherein the computer is adapted to decrypt
2 the encrypted restorable resource using the public key and install the restorable resource on
3 the computer.

1 31. The computer system of claim 24, wherein the configuration manager is
2 adapted to provide an encrypted restorable resource to the server, the encrypted restorable
3 resource is encrypted with a private key, and the configuration manager is adapted to provide
4 a public key corresponding to the private key to the server.

1 32. The computer system of claim 31, wherein the server is adapted to decrypt the
2 encrypted restorable resource using the public key and install the restorable resource on the
3 computer.

1 33. The computer system of claim 22, wherein the configuration manager is
2 adapted to encrypt the restorable resource with a public key associated with the computer.

1 34. The computer system of claim 33, wherein the computer is adapted to decrypt
2 the encrypted restorable resource using a private key corresponding to the public key and
3 install the restorable resource.

1 35. The computer system of claim 24, wherein the configuration manager is
2 adapted to encrypt the restorable resource with a public key associated with the computer,
3 and the server is adapted to decrypt the encrypted restorable resource using a private key
4 corresponding to the public key and install the restorable resource on the computer.

1 36. The computer system of claim 22, wherein the computer is adapted to register
2 a plurality of installed resources associated with the computer in the configuration database.

1 37. The computer system of claim 36, wherein the computer is adapted to register
2 the plurality of installed resources by providing a resource name and a computer identifier
3 associated with the computer.

1 38. The computer system of claim 37, wherein the computer is adapted to provide
2 the resource name and computer identifier in an encrypted file.

1 39. The computer system of claim 22, wherein the configuration manager is
2 adapted to store billing information based on the restoration request.

1 40. The computer system of claim 36, wherein the configuration manager is
2 adapted to store billing information based on the plurality of installed resources registered.

1 41. The computer system of claim 40, wherein the configuration manager is
2 adapted to store billing information based on the plurality of installed resources registered.

1 42. The computer system of claim 22, wherein the configuration database includes
2 resource identifying information, resource version information, and resource location
3 information.

1 43. The computer system of claim 22, further comprising a plurality of computers,
2 each having installed resources registered in the configuration database, and wherein the
3 configuration manager is adapted to generate billing information using a first rate for
4 installed resources that are unique to one of the computers, and generate billing information

5 using second rate, different than the first rate, for installed resources that are common to at
6 least two of the computers.

1 44. The computer system of claim 36, wherein the configuration manager is
2 adapted to provide the restorable resource by performing at least one of providing an address
3 for the installed resource and providing a previously stored installed resource, and the method
4 further comprises generating billing information using a first rate for installed resources that
5 registered by providing the address for the installed resource, and generating billing
6 information using a second rate, different than the first rate, for installed resources that are
7 registered by storing the installed resource.

1 45. The computer system of claim 22, wherein the configuration manager is
2 adapted to share a secret key with the computer, encrypt a random number with the secret
3 key, generate a session key based on the secret key and the encrypted random number, and
4 provide the restorable resource using the session key.

1 46. The computer system of claim 22, wherein the configuration manager is
2 adapted to identify an available upgrade for the restorable resource and offer the upgrade of
3 the restorable resource in lieu of the restorable resource.

1 47. A program storage device, comprising:
2 a configuration database including resource information;
3 program instructions, that when executed by a processing device perform a method
4 for restoring a resource on a computer, the method comprising:

5 receiving a restoration request including a computer identifier
6 associated with the computer;
7 accessing the configuration database based on the computer identifier
8 to identify a restorable resource associated with the computer;
9 and
10 providing the restorable resource to the computer.

1 48. The program storage device of claim 47, wherein providing the restorable
2 resource to the computer in the method includes providing the restorable resource to a server
3 connected to the computer.

1 49. The program storage device of claim 47, wherein providing the restorable
2 resource to the computer in the method includes providing an address for the restorable
3 address.

1 50. The program storage device of claim 47, wherein the method further
2 comprises authenticating the restoration request.

1 51. The program storage device of claim 47, wherein providing the restorable
2 resource in the method comprises providing an encrypted restorable resource.

1 52. The program storage device of claim 51, wherein the encrypted restorable
2 resource is encrypted with a private key, and the method further comprises providing a public
3 key corresponding to the private key to the computer.

1 53. The program storage device of claim 47, wherein the method further
2 comprises encrypting the restorable resource with a public key associated with the computer.

1 54. The program storage device of claim 47, wherein the method further
2 comprises generating billing information based on the restoration request.

1 55. The program storage device of claim 47, wherein the method further
2 comprises generating billing information based on the resource information in the
3 configuration database.

1 56. The program storage device of claim 47, wherein the configuration database
2 includes resource identifying information, resource version information, and resource
3 location information.

1 57. The program storage device of claim 47, wherein the configuration database
2 includes information related to installed resources on a plurality of computers, and the
3 method further comprises:

4 generating billing information using a first rate for installed resources that are unique
5 to one of the computers; and
6 generating billing information using a second rate, different than the first rate, for
7 installed resources that are common to at least two of the computers.

1 58. The method of claim 47, wherein providing the restorable resource in the
2 method comprises at least one of providing an address for the restorable resource and
3 providing a previously stored copy of the restorable resource, and the method further

4 comprises generating billing information using a first rate for providing the address for the
5 restorable resource, and generating billing information at a second rate, different than the first
6 rate, for providing the previously stored copy of the restorable resource.

1 59. The program storage device of claim 47, wherein providing the restorable
2 resource in the method comprises:

3 sharing a secret key with the computer;
4 generating a session key based on the secret key and a random number; and
5 providing the restorable resource using the session key.

1 60. The program storage device of claim 47, wherein the method further
2 comprises:

3 identifying an available upgrade for the restorable resource; and
4 offering the upgrade of the restorable resource in lieu of the restorable resource.

1 61. A system for updating a computer system having a plurality of installed
2 resources, comprising a configuration manager adapted to store a configuration database
3 including resource information associated with the computer, receive a restoration request
4 from the computer including a computer identifier associated with the computer, access the
5 configuration database to identify a restorable resource based on the computer identifier
6 associated with the computer, and provide the restorable resource to the computer.

1 62. The computer system of claim 61, wherein the configuration manager is
2 adapted to provide an address for the restorable address to the computer.

1 63. The computer system of claim 61, wherein the configuration database includes
2 resource identifying information, resource version information, and resource location
3 information.

1 64. A computer system for restoring resources on a computer, comprising:
2 means for storing resource information;
3 means for receiving a restoration request including a computer identifier associated
4 with the computer;
5 means for accessing the resource information based on the computer identifier to
6 identify a restorable resources associated with the computer; and
7 means for providing the restorable resource to the computer.